

**MEETING MINUTES OF THE  
ARIZONA GEOGRAPHIC INFORMATION COUNCIL  
DATA COMMITTEE - LIDAR WORKGROUP**

**DRAFT**

A public meeting of the Arizona Geographic Information Council was convened on February 25, 2020 at 1:06 PM at the Arizona State Land Department, 1616 West Adams Street, Phoenix, AZ 85007 in room 215 and on Webex. Present at the meeting were the following members or designees of the AGIC LiDAR Workgroup:

**Table 1: Committee Voting Members**

<b>Member</b>	<b>Agency/Company</b>	<b>In Attendance</b>
Mark Christiano, Co-chair	US Forest Service	Yes, phone
Jenna Leveille, Co-chair	Arizona State Land Department	Yes, in person
Ann Anderson	Beale Mountain Forestry	No, without notice
Ramon Arrowsmith	ASU	No, without notice
Noah Bard	US Forest Service	No, without notice
Kevin Blake	Yavapai County	Yes, phone
Kim Denney	Atlantic	Yes, phone
Craig Erdman	GeoEngineers, Inc	No, without notice
Benjamin Hickson	University of Arizona	Yes, phone
Keith Larson	USDA – NRCS	Yes, phone
Arron Lee	Merrick & Co	Yes, phone
Roses Lockwood	Campbell Global	Yes, phone
Jason Nyberg	Quantum Spatial	Yes, in person
Eric Shreve	AZ DEMA	No, without notice
Nik Smilovsky	ASU	No, without notice
Charlie Warren	Darling Geomatics	Yes, phone
Travis Woolley	The Nature Conservancy	Yes, phone

**Table 2: Public at Large in Attendance**

<b>Member</b>	<b>Agency/Company</b>	<b>In Attendance</b>
John Ashley	Maricopa County	Yes
Chris Bertrand	Tohono O’Odham Nation	Yes
Jason Caldwell	Sanborn	Yes
Joe Cook	AZ Geologic Survey	Yes
Helen Costello	Coconino County	Yes

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<b>Member</b>	<b>Agency/Company</b>	<b>In Attendance</b>
Drew Decker	US Geologic Survey	Yes
David Holm	Frugo	Yes
Darin Lisonbee	City of Phoenix	Yes
Mark Nigrelli	US Forest Service	Yes
Teki Sankey	NAU	Yes
Chelsea Scott	ASU	Yes
Mike Shelton	AZ Dept Water Resources	Yes
Jill Sherwood	ASU	Yes
Bandon Van Horn	Yavapai County	Yes

- I. **Call to order:** Meeting was called to order at 1:06 pm; Introductions were made by the committee; ensuring attendance list was managed and quorum established.
- II. **Approval of December meeting minutes:** Jenna Leveille asked for a motion to approve the December 18, 2019 meeting minutes. Mark Christiano motioned, and Ben Hickson seconded. There was no discussion. The motion passed unanimously.
- III. **AGIC Council meeting update:** The AGIC Council met on Feb 11 for a full day session. The morning session was a facilitated leadership workshop and the afternoon was a regular Council Meeting.
  - Leadership Workshop – Outcomes: Excellent turn out; over 50 people participated. The workshop was broken into 4 topic areas identified by survey and the group split into teams of 10+ for discussion; AZGeo, professional development, collaboration and visibility. Jenna will share the report provided by the facilitator. Mark commented that the Lidar WG was identified as an effective example of public/private collaboration across disciplines.
  - NSGIC Activities
    - Geospatial Maturity Assessment (GMA) - Jenna reported on the GMA state report cards given by NSGIC as a tool for summarizing responses to the GMA survey. Arizona’s overall grade was a B-. Jenna showed the other state grades; AZ right in the middle. She noted that a lack of high-quality elevation data did impact score;

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2020 acquisitions were not considered. Jenna will provide a link to the full report (<https://www.nsgic.org/geospatial-maturity-assessment>).

- Census Differential Privacy: Jenna informed the WG about Census planned activities concerning the 2020 Data Products. Census intends to inject noise into the raw census data collected in effort to protect individual privacy. They are referring to their efforts as differential privacy (DP). The DP algorithm will be applied and in its current iteration will cost data accuracy. Population counts will only be accurate at the state level. All demographic data below the state level will be affected. The Census has no alternative plan in place, though it is possible the algorithm will be slightly adjusted based on feedback from the user community. NSGIC is coordinating with other state geographic representatives, State Demographers and State Data Center Directors to collectively respond to the Census with concerns and challenges. Jenna is collecting a list of potential program impacts for Arizona to share with Governor Ducey and the national GIS community. Participants are encouraged to share impacts with Jenna.
- Professional Development – The Council continues to explore opportunities for AGIC to support and encourage professional development opportunities for the AZ GIS community. The Council discussed increased AGIC presence at existing events, organizing networking events, coordinating mentoring opportunities, and providing continuing education. This is an ongoing effort that several AGIC Committees and WG are supporting.
- The Arizona Lidar Acquisition Plan was approved by the Council unanimously. It will be posted on the AGIC website as an official AGIC publication.

### IV. Announcements:

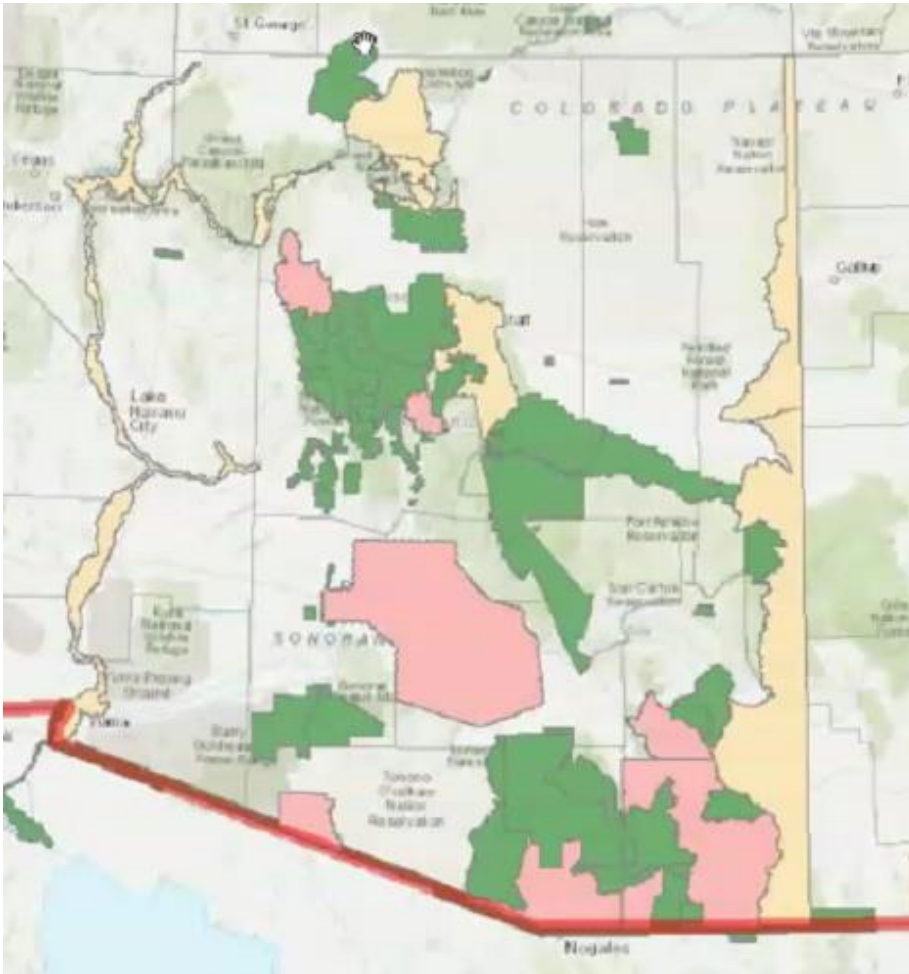
- USGS Director of Geospatial Programs meeting: Mark, Jenna, and other AZ lidar stakeholders met with Dr. Michael Tischler and his team from USGS at the UA in Feb. It was an opportunity to educate his team on the application and status of lidar in Arizona. The meeting went well, and it is worth noting that the lidar efforts in Arizona have caught the attention of those at the highest levels of the USGS Geospatial Program. This is positive for future AZ lidar acquisition through the 3DEP program.

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- NSGIC Mid-year meeting – Jenna reported that there is a proposed program being discussed to pilot a program for the development of National Hydrography Infrastructure (NHI) dataset utilizing lidar derived sources. AZ has been approached as a possible pilot state for the program. Jenna will get updates on the NHI, 3DEP, Census DP and the national landscape and report back to the group.
- AGIC Workshops – Free and open to the public. Contact Jenna if interested in registering:
  - NRWG NHD Workshop - April 2
  - UAS Workshops:
    - UAS Peer Exchange – April 1&2
    - UAS Fly-in – TBD spring
  - AGIC/Consortech FME Workshop - April 22
  - 911 Committee NG911 Workflow Workshop - April 23

V. **3DEP Update:** Drew Decker shared a 3DEP status map. See the image below.

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Green is collected/complete – the data is generally available. Tan is in production now. Pink is planned and expected to get underway soon. Drew reported that NRCS, Maricopa/Pinal project, Cochise upgrade, Organ Pipe Cactus NM are all approved and likely funded. 2<sup>nd</sup> phase of Grand Canyon NP may not be funded. Internal USGS science group has funding to fill in Santa Cruz County. FEMA has an interest area along I-40 corridor in Navajo County.

Drew added that the 3D Nation Study is wrapping up. There should be a final draft report for review in the fall.

- VI. **BAA Status:** Mark called for any updates on any upcoming projects or BAA coordination for 2021. Ben reported that PAG is working to coordinate stakeholders to acquire the remaining areas of Pima County not collected in 2018. The Tohono O’Odham is the greatest challenge. Working towards QL1 collection. Drew added that USGS has a tribal liaison that could possibly help with the process.

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**VII. Review of 2020 Work Plan Goals:** Mark and Jenna led a general discussion reviewing the 2020 WG goals:

- Spring Symposium: Primary purpose is providing a networking opportunity for BAA coordination for 2021. Mark suggested including a section on how to put together a BAA and possible presentations on common use cases.
  - Logistics: Jenna led the discussion on day/time/location options. She noted that the ADOT Conference space is already reserved for March 31 and could be a possibility. Jill Sherwood suggested use of the Hayden building at ASU. New space for the ASU Mapping & Geospatial Hub. Mark noted that the end of March is not practical for scheduling. Jenna and Mark will call for a team to begin coordinating details.
- AGIC Conference Lidar Track: Planning will require a team to help recruit 8-9 presenters. Last year there was focus on cutting edge applications of lidar. Mark would like feedback from potential attendees on what they would like. Jenna clarified that a track is 90 min. With enough interest we could be given a half day track with two 90 min sessions.
- Website Content – Mark reviewed efforts to expand the website content. Particularly interested in educational content. GTAC has given permission to use the USFS Lidar training materials. Additional desires include video links, and basic lidar 101 and BAA information.
- 2020 Acquisition Plan Update – Mark reiterated a need for a team to work on updates to the plan.

**VIII. Call for Teams:** Mark and Jenna outlined the areas where volunteers were needed: Symposium planning, AGIC Conference track planning and website content development. If interested in participating/volunteering email Jenna or Mark.

**IX. Demo:**

- Lidar Plot Protocol: Mark gave a demo of the lidar plot protocol he is developing for the Kaibab. He reviewed the data collection details; time required, what & where data needs captured, establishing the plots (consideration of enough samples of each category being collected; canopy height & cover, types of timber & woodlands). They determined

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there were 6 plots per category required. They developed workflow definitions and documentation. The accurately collected field data relating to the lidar collection is critical for future modeling.

- Lidar Plats and FFI – this database is free to the public and allows documentation to be easily collected. It is a great mechanism to track spots/plots over time. Protocols that already exist can be imported. This tool is perfect for regression analysis.

**X. Information or Topics for Future meetings:** None

**XI. Call to the Public:** None

**XII. Adjourn:** Meeting adjourned at 2:28 pm

A copy of the agenda background material provided to working group members is available for public inspection at the Arizona Geographic Information Council's office at 1616 West Adams Street, Phoenix, AZ 85007, Room 216A.

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Members of the Committee will attend either in person or by telephone conference call.

Questions regarding the meeting may be referred to Jenna Leveille at 602-364-3747.

This agenda will be posted at Arizona State Land Department, 1616 W. Adams, Phoenix, AZ 85007 by Jenna Leveille on 24 hours prior to meeting.